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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,191	09/25/2002	Bradley Graham Moore	GECAN-3220	8138
23465	7590	07/16/2004	EXAMINER	
JOHN S. BEULICK C/O ARMSTRONG TEASDALE, LLP ONE METROPOLITAN SQUARE SUITE 2600 ST LOUIS, MO 63102-2740			COMAS, YAHVEH	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/065,191

Applicant(s)

MOORE, BRADLEY GRAHAM

Examiner

Yahveh Comas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 4/5/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-45 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31-45 is/are allowed.
- 6) ☒ Claim(s) 17-26 and 28-30 is/are rejected.
- 7) ☒ Claim(s) 27, 38 and 42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/25/02</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments regarding the restriction filed 4/5/2004 have been fully considered but they are not persuasive.

In response to applicant arguments regarding the restriction of claims 17-45, drawn to a lamination configuration are not persuasive since a different process can be used such as form the lamination by molding.

### ***Claim Rejections - 35 USC § 112***

Claims 23, 28, 38 and 42 recites the limitation "first edge and second edge" in lines 1 and 4. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 17-21 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenberg U.S. patent No. 3,027,474.

Rosenberg discloses a lamination configuration for use in a rotor core, the lamination (10) comprising, a unitary body fabricated from ferromagnetic material, said body comprising, an outer peripheral edge, an inner peripheral edge spaced radially from said outer peripheral edge, and a plurality of openings (12) that extend through said body between said outer peripheral edge and said inner peripheral edge of the

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body such that said opening are arcuately spaced about said body, said opening each comprising an edge, said edge comprising a tongue (20), said tongue comprising a fixed end and a distal end, said tongue extending from said edge into said opening. The openings are each substantially trapezoidal-shaped, the tongues extend perpendicular to a radial axis of said opening and said openings are configured to receive a conductive rotor bar (14). The rotor has an aperture that extends there through for receiving a rotor shaft (11). It is inherently that said tongue is resiliently flexible in first direction toward said outer peripheral edge and in a second direction toward the inner peripheral edge.

2. Claims 17-21, 22-25, 28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Maslennikov et al. U.S. Patent No. 3,688,141.

Maslennikov discloses a lamination configuration for use in a rotor core (3), the lamination comprising, a unitary body fabricated from ferromagnetic material, said body comprising, an outer peripheral edge, an inner peripheral edge spaced radially from said outer peripheral edge, and a plurality of openings that extend through said body between said outer peripheral edge and said inner peripheral edge of the body such that said opening are arcuately spaced about said body, said opening each comprising an edge, said edge comprising a tongue, said tongue comprising a fixed end and a distal end, said tongue extending from said edge into said opening. The openings are each substantially trapezoidal-shaped, the tongues extend perpendicular to a radial axis of said opening and said openings are configured to receive a conductive rotor bar (7). The rotor has an aperture that extends there through for receiving a rotor shaft (2). Also

the first edge comprises a tongue comprising a fixed end and a distal end, said first edge tongue extends from said first edge into said opening, said tongue disposed proximate to said inner peripheral edge and said second edge comprises a tongue comprising a fixed end and a distal end, said second edge tongue extends from said second edge into said opening, said tongue disposed proximate to said inner peripheral edge. The first edge tongue extends into said opening a first distance, said second edge tongue extends into said opening a second distance proximate to the first edge, wherein said first distance being substantially equal to said second distance (see fig. 3). It is inherently that said tongue is resiliently flexible in first direction toward said outer peripheral edge and in a second direction toward the inner peripheral edge.

3. Claim 17, 19-20, 28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Endress U.S. Patent No. 3,778,652.

Endress discloses a lamination configuration for use in a rotor core (10), the lamination comprising, a unitary body fabricated from ferromagnetic material, said body comprising, an outer peripheral edge (16, 15), an inner peripheral edge (17) spaced radially from said outer peripheral edge (16,15), and a plurality of openings that extend through said body between said outer peripheral edge and said inner peripheral edge of the body such that said opening are arcuately spaced about said body, said opening each comprising an edge, said edge comprising a tongue (20), said tongue (20) comprising a fixed end and a distal end, said tongue (20) extending from said edge into said opening. The tongues (20) extend perpendicular to a radial axis of said opening, said openings are configured to receive a conductive rotor bar (40) and the rotor has a

aperture that extend there through for receiving a rotor shaft (11). The opening also has a third edge parallel and approximate to said outer peripheral edge, said third edge (12) comprising an opening to said outer peripheral edge.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over  
Rosenberry U.S. patent No. 3,027,474.

Rosenberry discloses the claimed invention except for the tongue distal end comprising a raised pad that extends toward said outer peripheral edge. However, Rosenberry discloses that slots (12) of different size or configuration may be used (column 2, lines 60-70). This different sizes or configurations of slot serves the same

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function as the deep-bar slot previously discussed and the purpose of the high resistance section (18) and tongue (20) is to limit the flow of the current in this area during starting, therefore providing a tongue distal end comprising a raised pad that extends toward said outer peripheral edge would have been an obvious matter of design choice since such modification would involve a mere change in the size of the slot. Therefore it would have been obvious to one having skill in the art at the time the invention was made to modify Rosenberry's invention and provide a tongue distal end comprising a raised pad that extends toward said outer peripheral edge since it was known in the art that a change in size is generally recognized as being within the level of ordinary skill in the art.

5. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maslennikov et al. U.S. Patent No. 3,688,141 in view of Taylor U.S. Patent No. 1,950,197.

Maslennikov discloses the claimed invention except for the rotor having a central aperture comprising a key way and the lamination stacked such that said one slot are skewed. However, Taylor discloses a rotor having a key way (6) for mounting a rotor (1) to a shaft (5) with a skewed core in order to form a longitudinal groove in the periphery of the rotor for casting the rotor bars (4). Therefore it would have been obvious to one having skill in the art at the time the invention was made to modify Maslennikov's invention and provide a key way in the rotor and skewed rotor core as disclosed by Taylor since that would have been desirable in order to mount the rotor to a shaft and provide a longitudinal groove in the periphery of the rotor for casting the rotor bars.

***Allowable Subject Matter***

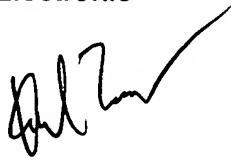
6. Claims 31-37, 39-41 and 43-45 are allowed.
7. Claims 27, 38 and 42 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yahveh Comas whose telephone number is (571)272-2020. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KARL TAMAI  
PRIMARY EXAMINER

YC